19

Pat 1
3152
5122

JOURNAL

OF THE

American Veterinary Medical Association

FORMERLY

AMERICAN VETERINARY REVIEW

Original Official Organ U. S. Vet. Med. Ass'n.

Edited and Published for

THE AMERICAN VETERINARY MEDICAL ASSOCIATION

By

H. PRESTON HOSKINS, DETROIT, MICH.

EXECUTIVE BOARD

GEORGE HILTON, 1st District; E. P. ALTHOUSE, 2d District; L. A. MERILLAT, 3d District; J. R. MOHLER, 4th District; C. H. STANGE, Chairman, 5th District; GEO. H. HART, 6th District; R. S. MACKELLAR, Member-at-Large.

Volume LXXIV

NEW SERIES VOLUME 27

DECEMBER, 1928, to JUNE, 1929

DETROIT, MICH.

1929

SF601
.A5

INDEX OF AUTHORS

Baker, E. T., 196.
Barber, Don J., 98.
Barger, J. A., 89.
Barnes, M. F., 95.
Beaudette, F. R., 929, 1064.
Benbrook, E. A,, 1009.
Biester, H. E., 345.
Bittles, E. E., 218.
Blackberg, S. N., 336.
Bonstedt, G., 661.
Boughton, I. B., 921.
Brandly, C. A., 364, 444.
Broerman, Alvin, 762.
Brown, F. H., 178.
Brown, H. W., 214.
Brueckner, A. L., 95.
Bryan, Arthur H., 100.
Bundesen, Herman N., 484.
Bunyea, Hubert, 461.
Bushnell, L. D., 364, 444.
Cahill, E. A., 425.
Carmichael, Emmet B., 98.
Cary, C. A., 413.
Clark, L. T., 885.
Crawford, A. B., 773.
Crawford, J. Elliott, 743.
Delez, A. L., 227.
Dimock, W. W., 327.
Doyle, L. P., 1070.
Ducey, Michael D., 783.
Edgington, B. H., 762.
Emmerson, M. A., 372.
Feldman, William H., 1040.
Fish, Pierre A., 915.
Foster, J. P., 892.
Foust, H. L., 1052.
Freidlander, Richard Dufficy, 932.
Gillies, D. R., 476.
Giltner, Ward, 880, 885.
Glover, A. J., 577.
Glover, Geo. H., 293.
Graham, Robert, 1060.
Green, R. G., 277.
Grossman, James D., 357.
Hagan, W. A., 985.
Haigler, S. W., 205.
Hallman, E. T., 926.
Handley, G. A., 248.
Hart, E. B., 673.
Hectorne, R. L., 381, 1060.
Hell, Henry, 171.
Hinshaw, W. R., 434.
Hollingworth, W. G., 487.
Horne, S. J., 596.
Huddleson, I. F., 885, 940.
Hudson, C. B., 929, 1064.
Hull, Thomas G., 1047.
Imler, F. A., 901.
Jackson, R. E., 598.
Jonnson, Myrtle, 940.
Johnson, Robert E., 12.
Jungherr, E., 63.
Kegel, Arnold, 409.
Kelser, R. A., 28.
Kernkamp, H. C. H., 844.
Killham, B. J., 183.
Kleberg, Richard, 587.
Larson, W. P., 581.
Lewis, Paul A., 145.
Lochead, D. C., 526.
Lumb, J. W., 92.
McAlpine, James G., 12.
McBryde, C. N., 153.
McKenney, Frank D., 1067.
McLaughlin, A. R., 49.
McMullen, R. H., 55.
McNutt, S. H., 94, 345, 752.
MacKintosh, P. G., 193.
Marsh, H., 63, 724.
Mathews, Frank P., 238, 937, 1071.
Mayo, N. S., 918.
Miller, Emerson R., 376.
Mitchell, H. H., 651.
Moon, Joseph G., 199.
Moore, Veranus A., 605.
Moore, William, 498.
Munce, T. E., 622.
Murray, Chas., 345, 752.
Niles, W. B., 153.
Nordby, Julius E., 911.
Owen, William B., 58.
Patton, J. W., 768.
Pinner, Max, 547.
Price, Emmet W., 864.
Purwin, Paul, 345, 752.
Rawson, G. W., 1027.
Rettger, Leo F., 12, 453.
Roderick, Lee M., 314.
Rodier, E. A., 42.
Roseboom, B. B., 768.
Schalk, A. F., 301.
Schlingman, A. S., 91, 885.
Schnelle, Gerry B., 789.
Schroeder, E. C., 773.
Shillinger, J. E., 277, 936.
Sholl, L. B., 247.
Shope, Richard E., 145.
Simms, B. T., 359.
Smead, M. J., 91.
Stafseth, H. J., 1069.
Stiles, Geo. W., 704.
Thompson, John, 512.
Thorp, Frank Jr., 1060.
Topacio, Teodulo, 28.
Traum, Jacob, 553.
Turner, Henry W., 199.
Van Es, L., 505.
Vansant, Joseph W., 785.
Vergeer, Teunis, 786.
Welch, H., 63.
Wegner, E. E., 218.
Weiner, J. H., 1004.
White, David S., 283.
White, George C., 12.
Wight, A. E., 517.
Wilson, I. D., 439.
Wineland, E. D., 1073.
Wood, F. W., 736.
Youngberg, Stanton, 28.
Zeissig, A., 985.

LIST OF ILLUSTRATIONS

A Calf with Ectopic Teratism and Total Eventration, 98.

Fig. 1. Teratism with eventration, 99.

Photograph, Schmidt Memorial, 113.

Photograph, A. V. M. A. Clinic at University Farm—Sheep Section, 116.

Photograph, A. V. M. A. Clinic at University Farm—Poultry Section, 117.

Photograph, Local Committee on Arrangements at Minneapolis, 119.

Portrait, Dr. C. D. McGilvray, 125.

Photograph, Goat Nurses Calf, 217.

Pathological Alterations Observed in Cattle Fed on Special Rations, 227.

Fig. 1. Liver (Aut. 1314), 228.
Fig. 2. Kidney (same as fig. 1), 228.
Fig. 3. Kidney (Aut. 1380), 230.
Fig. 4. Liver (Aut. 1387), 230.
Fig. 5. Liver (same as fig. 4), 232.
Fig. 6. Kidney (same as fig. 4), 232.
Fig. 7. Liver (Aut. 1355), 234.
Fig. 8. Kidney (Aut. 1389), 234.
Fig. 9. Optic nerve (same as fig. 8), 236.
Fig. 10. Optic nerve (Aut. 1350), 236.

Adenosarcomata of the Kidneys of Chickens, 238.

Fig. 1. A well-advanced case, 239.
Fig. 2. The microscopic appearance of case 19, 240.
Fig. 3. A higher magnification of fig. 2, 240.
Fig. 4. Showing cystic spaces, 243.
Fig. 5. Case 212. The primary tumor (A) and a secondary tumor in the left thigh muscle (B), 242.
Fig. 6. The microscopic appearance of case 212, 243.
Fig. 7. Case 199, showing a connective tissue capsule separating the kidney from the tumor, 245.
Fig 8. Case 173. Keratohyalin and adenomatous structures supported by a fibrous stroma, 245.

Hematoma of the Ovary of a Cow, 247.

Fig. 1. Hematoma of ovary of cow, 247.

Ectopia Cordis, 248.

Fig. 1. Ectopia cordis in a calf, 248.

An Interesting Family, 249.

Fig. 1. An unusual family, 249.

Photograph, A Milkman of Quito, Ecuador, 282.

The Pathology of Sweet Clover Disease in Cattle, 314.

Fig. 1. Fatal hemorrhage from sweet clover, 315.
Fig. 2. Rumen with characteristic hemorrhage, 316.

Photograph, Lt. Col. Robert J. Foster and Mrs. Foster on the Equator, 383.

Nutritional Diseases of Swine, 661.

Fig. 1. A cause of lameness in pigs fed deficient rations, 669.
Fig. 2. Fractured vertebrae a cause of posterior paralysis, 670.

Investigations on Anaplasmosis in Cattle, 704.

Fig. 1. Anaplasma marginale in blood film, 708.
Fig. 2. A biting mite *Laelaps glasgowi* (Ewing) from a rat (Kansas), 716.
Fig. 3. A typical case of acute anaplasmosis (Oklahoma), 719.

Swine Pox, 752.

Fig. 1. Portion of the skin of the belly of an affected pig, 754.
Fig. 2. Section of the skin of an affected pig showing the developing lesion, x35, 756.
Fig. 3. (Above) Section of swine-pox lesion, x620, 758.
Fig. 4. (Below) Section of the epidermis through an early pox lesion, x730, 758.
Fig. 5. (Above) Section of the epidermis through an early lesion, 760.
Fig. 6. (Below) A pox lesion nearly healed, 760.

Photograph, Distinguished Scientists, Dr. P. P. Laidlow (Left) and Major G. W. Dunkin, 767.

Photograph, Veterinary Building, 794.

Some of the Physico-Chemical Properties of the Virus of Hog Cholera, 844.

Fig. 1. The ultrafilter, 855.

Photograph, A Contented Pair, 863.

Photograph, Dr. Mayo Visits Cuba, 919.

Photograph, Cuban National Veterinary Association, 920.

A Sand-Laden Liver in a Hog, 937.

Fig. 1. The white streaks in the liver show the course taken by the sand-filled cavities, 938.
Fig. 2. A cross-section of the liver and its sand-filled cavities, 939.

Portrait, Dr. Edward A. Cahill, 943.

PHOTOGRAPH, BELLE ISLE BRIDGE, DETROIT, 1008.

FECAL EXAMINATION FOR EVIDENCE OF PARASITISM IN DOMESTIC ANIMALS, 1009.

Fig. 1. Apparatus and materials used in making fecal examinations for parasite eggs, 1009.
Fig. 2. Showing how to make a "headed" glass rod, 1010.
Fig. 3. Taking a sample of feces of at least 1 gram, 1012.
Fig. 4. Mixing the feces with water, 1012.
Fig. 5. Removal of coarse particles from feces by straining, 1012.
Fig. 6. Filling a tube nearly half-full of the fecal suspension, 1013.
Fig. 7. Adding sugar solution equal in amount to the fecal suspension, 1013.
Fig. 8. Mixing sugar solution and feces by inverting the tube several times, 1013.
Fig. 9. Centrifuging the sample for about 3 minutes, 1014.
Fig. 10. Lifting off the surface layer of fluid from the tube after centrifuging, using a "headed" glass rod, 1015.
Fig. 11. Transferring a drop from the tube to a microscope slide, 1015.
Fig. 12. Applying a micro-cover-slip to the drop on the slide, 1015.
Fig. 13. Showing how the drop under the cover-slip should be systematically searched, 1016.
Fig. 14. Egg of *Ascaris equi*, the common roundworm of the horse, 1017.
Fig. 15. Eggs of *Strongylus vulgaris* of the horse, 1017.
Fig. 16. *Strongylidae* eggs from the horse, 1018.
Fig. 17. Eggs of *Anoplocephala mamillana*, a tapeworm of the horse, 1018.
Fig. 18. Egg of *Oxyuris equi*, the pinworm of the horse, 1019.
Fig. 19. Egg of *Haemonchus contortus*, the stomach worm of sheep, cattle and goats, 1019
Fig. 20. Egg of *Nematodirus filicollis*, one of the hair-like nematodes from the small intestine of sheep, 1020.
Fig. 21. Eggs of *Ascaris lumbricoides*, the common roundworm of the pig, 1020.
Fig. 22. Eggs of *Macrocanthorynchus hirudinaceus*, the thorny-headed worm of the pig, 1021.
Fig. 23. Eggs of *Trichuris suis*, the whipworm of the pig, 1021.
Fig. 24. Eggs from the feces of the dog, 1022.
Fig. 25. Egg of *Ancylostoma caninum*, the hookworm of the dog, 1022.
Fig. 26. Eggs of *Dipylidium caninum*, one of the tapeworms of the dog and cat, 1023.
Fig. 27. Eggs of *Taenia pisiformis*, one of the tapeworms of the dog, 1023.
Fig. 28. Spores or oöcysts of coccidia in the feces of the dog, 1024.
Fig. 29. Egg of *Trichuris depressiuscula*, the whipworm of the dog, 1024.
Fig. 30. Eggs of *Ascaridia perspicillum*, the roundworm of the chicken, 1025.
Fig. 31. Egg of *Capillaria retusa*, a hair-like nematode of the small intestine of the chicken, 1025.

INSECTS AND INSECT-BORNE DISEASES OF ANIMALS, 1027.

Fig. 1. The American dog or wood tick, 1028.
Fig. 2. The dog flea, 1033.
Fig. 3. The cat flea, 1034.
Fig. 4. The dog louse, 1035.

HETEROTOPIC DEPOSITS OF THYROID TISSUE IN A DOG ASSOCIATED WITH CARCINOMA OF THE LUNGS, 1040.

Fig. 1. Aberrant nodule of thyroid tissue in apical lobe of the left lung, 1041.
Fig. 2. (Above) Aberrant thyroid tissue from sublaryngeal region (x220), 1042.
Fig. 3. (Below) Aberrant thyroid tissue from the periaortic fat body (x220), 1042.
Fig. 4. (Above) Adenocarcinoma of the lung (x150), 1044.
Fig. 5. (Below) Aberrant thyroid tissue from the pulmonary nodule which is shown in gross in figure 1 (x125), 1044.

PHOTOGRAPH, MICHIGAN CENTRAL TERMINAL, DETROIT, 1046.

PHOTOGRAPH, EXCURSION STEAMERS ON DETROIT RIVER, 1051.

A DISSECTION OF THE NERVE SUPPLY TO THE GASTRIC COMPARTMENTS OF THE RUMINANT (BOVINE), 1052.

Fig. 1. Stomach of ox, 1053.
Fig. 2. Abomasum of ox, 1054.
Fig. 3. Abomasum of ox, 1055.
Fig. 4. Stomach of ox, 1056.
Fig. 5. Abomasum of ox, 1058.

PHOTOGRAPH, BOOK BUILDING AND TOWER, DETROIT, 1059.

CAPILLARIA IN CHICKENS, 1060.

Fig. 1. Follicular diphtheritic enteritis, 1060.
Fig. 2. Follicular diphtheritic enteritis, 1061.
Fig. 3. Eggs of capillaria in the diphtheritic membrane, 1062.
Fig. 4. Egg of capillaria (highly magnified), 1062.

OPERATIVE RELIEF FOR OVA IN THE PERITONEAL CAVITY OF THE CHICKEN, 1067.

Fig. 1. The hen before operation, 1067.
Fig. 2. The hen eight days after operation, 1068.

A GENERALIZED MELANOSARCOMA IN A MULE, 1071.

Fig. 1. The intestine showing numerous melanomas, 1071.
Fig. 2. The spleen showing three metastatic tumors, 1072.

PHOTOGRAPH, TEACHING THE YOUNG IDEA HOW TO FISH, 1092.

INDEX OF SUBJECTS

Abstracts:

Brucella, The Position of Para-Abortus and Para-Melitensis Strains in the Genus, 940.
Foot-and-Mouth Disease with "Schwefliger Saure" (SO_2 preparation), as well as Sodium Hydrate). (Versuche zur Disinfektion bei Maul and Klauenseuche mit schwefliger Saure sowie mit Natronlauge), Disinfection Experiments in, 791.
Heredity in the Jack., 104.
Maul und Klauenseuche durch Ringimpfungen, Die Bekampfung des, 792.
Tapioca, Strengthening of Immunity by Injection of, 104.

Army Veterinary Service:

Animals, Army has 48,000, 108.
Changes Relative to Veterinary Officers, 107, 250, 383, 695, 793, 942, 1074.
Hoskins Medal Awarded, 695.
Motorisation Discussed, 107.

Association News:

American Veterinary Medical Association:

Applications for membership, 6, 139, 272, 406, 701, 839, 975.
Clinic, Report of the A. V. M. A., 114.
Executive Board Elections, 4, 139, 270, 404, 699, 837, 970.
Executive Board of the A. V. M. A., Minutes of Special Meeting of the, 384.
Financial Report—Dr. M. Jacob, Treasurer, December 31, 1928, 947.
Plans for Detroit, 138, 914.
Program Committee Meets, 971.

Women's Auxiliary:

Auxiliaries, To the, 1077.
Meeting of the Women's Auxiliary of the A. V. M. A., Report of the 1928, 119.
Men Only. Stop! Look! Listen! Act!, For, 797.
Men, To the, 272.
Wife, Mother, Daughter or Sister of a Member of the American Veterinary Medical Association, To the, 884.

U. S. Live Stock Sanitary Association:

Address, Opening, 409.
Address of the President, 413.

Reports:

Abortion, Committee on Infectious, 630.
Meat and Milk Hygiene, Committee on, 497.
Nutritional Diseases, Committee on, 679.
Parasitic Diseases, Committee on, 693.
Poultry Diseases, Committee on, 473.
Resolutions, Committee on, 689.
Secretary-Treasurer, 423.
Swine Diseases, Committee on, 432.
Terminology of Poultry Diseases, Committee on, 686.
Tick Eradication, Committee on, 602.
Tuberculosis, Committee on, 687.
Unification of Laws and Regulations, Committee on, 688.

Other Meetings:

Alabama Veterinary Medical Association and Short Course for Veterinarians, 956.
Arkansas Veterinary Medical Association, 815.
California Veterinary Conference, 103, 388.
Central Canada Veterinary Association, 814.
Central Pennsylvania Veterinary Club, 939.
Connecticut Veterinary Medical Association, 386, 820.
Cornell University, Conference for Veterinarians at, 809.
Delaware State Veterinary Medical Association, 1080.
Eastern States Tuberculosis Conference, 701.
Horse Association of America, 259.
Hudson Valley Veterinary Medical Society, 258, 961.
Kansas City Association of Veterinarians, 798.
Kansas Veterinary Medical Association, 390.
Linn County Veterinary Association, 1082.
Louisiana State Veterinary Medical Association, 392.
McLean County Veterinary Medical Association, 954, 1073.
Maine Veterinary Medical Association, 798.
Manitoba Veterinary Association, 960.
Maryland State Veterinary Medical Association, 805.
Massachusetts Veterinary Association, 257, 1084.
Michigan-Ohio Veterinary Medical Association, 1085.
Michigan's Sixth Annual Short Course, 818.
Mississippi State Veterinary Medical Association, 816.
Missouri Valley Veterinary Association, 258.
Missouri Veterinary Medical Association, 802.
Nebraska State Veterinary Medical Association, 386.
Nevada State Veterinary Association, 805.
New Hampshire Veterinary Medical Association, 391.
New Jersey, Veterinary Medical Association of, 954.
New York City, Veterinary Medical Association of, 122, 256, 387, 958, 1081.
Northeastern Pennsylvania Veterinary Medical Club, 182, 1083.
Oklahoma State Veterinary Medical Association, 801.
Ohio State Veterinary Medical Association, 799.
Ohio State Veterinary Conference, 405.
Ontario Veterinary Association, 122.
Pennsylvania Conference of Veterinarians, University of, 177, 800.
Pennsylvania State Veterinary Medical Association, 253.
Purdue University Veterinary Short Course, 255.
South Carolina Association of Veterinarians, 813.
South Dakota Veterinary Medical Association, 955.
Southern Kansas Veterinary Medical Association, 177.
Southeastern States Veterinary Medical Association, 962.
Southwestern Michigan Veterinary Medical Association, 128.
Southwestern Missouri Veterinary Medical Association, 261.
Southwestern Tuberculosis Conference, 128.
Twin City Veterinary Medical Association, 1079.
Western New York Veterinary Medical Association, 261.

Births.....131, 266, 400, 830, 964, 1089.

Clinical and Case Reports:

Anthelmintic Treatment of Hens on the Hatchability of Their Eggs, A Note on the Effect of, 91.

Bacillary White Diarrhea Testing in Kansas for 1927-28, Results of, 92.
Bacterium Pullorum from a European Bullfinch (*Pyrrhula Europa*), The Isolation of, 929.
Bodies in Throat of Cow, Foreign, 1073.
Brucella Group of Organisms, Some Observations on the Pathogenicity of Different Strains of the, 94.
Coccidiosis, Rickets as a Secondary Manifestation in, 1069.
Demodectic Mange, Heat as a Therapeutic Agent in the Treatment of, 785.
Dystokia in Bitches, 100.
Ectopia Cordis, 248.
Hatchability of Their Eggs, A Note on the Effect of Anthelmintic Treatment of Hens on the, 91.
Heat as a Therapeutic Agent in the Treatment of Demodectic Mange, 785.
Hematoma of the Ovary of a Cow, 247.
Hemorrhagic Septicemia with Report of One Outbreak in Swine, 95.
Kamala, an Anthelmintic for Removal of Tapeworms in Bears, 786.
Melanosarcoma in a Mule, A Generalized, 1071.
Ova in the Peritoneal Cavity of the Chicken, Operative Relief for, 1067.
Paratyphoid Infection in Cats, 932.
Periodic Ophthalmia Treated with Murcuric Iodid, A Case of, 381.
Poultry Feeds a Factor in the Dissemination of Poultry Diseases, 783.
Rickets as a Secondary Manifestation in Coccidiosis, 1069.
Sand-Laden Liver in a Hog, A, 937.
Streptotrichosis Canum—Pseudoactinomycosis of a Dog, 789.
Tapeworms in Bears, Kamala, an Anthelmintic for Removal of, 786.
Teratism and Total Eventration, A Calf with Ectopic, 98.
Tuberculosis in a Cowbird, A Case of, 1064.
Ulcers in Stomachs of Ranch Foxes, 936.
Wheat-Beard Injury in Pigs, A Case of, 1070.

Commencement:

Ontario Veterinary College, 1075.

Communications:

Loan Fund, NewYork State Veterinary Medical Society Establishes, 109.
Warning, 109.

Editorials:

Address, Change of, 837.
Anniversary, Fiftieth, 969.
Anti-Tuberculosis Vaccination, 697.
Climbing, Still, 973.
Distemper, Canine, 967.
Figures, More, 834.
Flight, The Second, 699.
Hungary, An Invitation from, 970.
Index Number, 969.
Membership Campaign, 833.
Merger, 836.
Munce Getting Around, President, 137.
Poultry Industry, Helping the, 1.
Race, A Pretty, 269.
Sanitarians All, 403.
Secretaries Aroused, Resident, 974.
Situation, A Satisfactory, 135.
States, Eight More, 971.
Veterinarians Honored, Two, 192.
Vitamins, Renaming the, 4.

Examinations, State Board...250, 843.

Marriages.....131, 266, 830, 964.

Meetings, Coming Veterinary 9, 142, 275, 408, 703, 843, 983.

Miscellaneous:

Abortion Disease, Program for Studying, 945.
Allied Laboratories, Incorporated, 943.
American Royal a Success, 170.
Antirabic Vaccination in Charleston, 761.
Binder for the JOURNAL, A, 5.
Binders Do You Want?, How Many, 252.
Breeder Addresses Veterinarians, Horse, 735.
Carbons for Light Therapy, 108.
Cattle-Tick-Quarantine Area Reduced, 27.
Circulation, 917.
Compliment, A Nice, 121.
Conference, Veterinarians', 910.
Contest, Prize Essay, 767.
Convicted of Obstructing Tuberculin Test, 358.
Correction, A, 356.
Cuban Veterinary School to Move, 820.
Dog Trials to End in Kentucky, 300.
Errata, 335, 910, 1085.
Examination, U. S. Civil Service, 27.
Family, An Interesting, 249.
Fluke, Poster Shows Control of, 863.
Foot-and-Mouth Disease Appears in California Again, 382.
Foot-and-Mouth Disease in California Apparently Under Control Again, 696.
Foot-and-Mouth Disease, Unfounded Rumors Concerning, 795.
International Veterinary Congress, 252.
Iowa Means Business, 404.
Kentucky, Publicity Bureau for, 941.
Kick's a Boost, Every, 204.
K. S. A. C. Prizes, 1075.
Massachusetts Conference and Clinic, 1078.
Michigan Meeting, 1008.
Minnesota Legislature Adopts Resolution, 1076.
Missouri Fair Creates Interest, Veterinary Building at, 794.
Missouri Meeting, 1003.
Missouri Plans Special Course, 57.
Missouri's Veterinary Building a Success, 110.
Mules Developed with Germany, Trade in Missouri, 112.
Non-Graduate Viewpoint, The, 941.
North Carolina First State to Complete Tuberculin-Testing of All Cattle, 251.
North Carolina Ladies Organize, 217.
North Carolina Meeting, 1074.
Oklahoma Meeting, 1059.
One Hundred Per Cent A. V. M. A., 224.
Parke, Davis & Co., Promotions Announced at, 380.
Pennsylvania Alumni Day, 1046.
Petroleum Best Dip for Hogs, Crude, 946.
Prepotency, 790.
Rabbit Raising, Disease Control Important in, 375.
Salaries Raised, 792.
Scabies Issued, Poster on, 793.
Sigler Brothers Get Write-Up, 54.
Sign, A Hopeful, 735.
Stallion, Veterinarians Purchase Arabian, 1078.
Survey of Live Stock Improvement, World, 900.
Test, Many Herds Await, 772.
Tick Described, Control of Sheep, 371.
Tick Law Violators Sentenced, 782.
Veterinarians Wanted, Four, 942.
Visitors at the JOURNAL Office, 111, 953.
Weather and Fresh Air, Cold, 3.
Wisconsin Speeds Tuberculosis Eradication, 751.
Women Veterinarians, 326.

Necrology:

Abbott, C. H., 265.
Anderson, J. P., 822.
Ashlock, Lloyd, 824.
Babbitt, Frank J., 822.
Badgley, Jed, 829.
Becker, Ray, 129.
Beechy, Levi P., 1086.

Behner, Christian F., 823.
Behrens, Charles F., 827.
Bell, Duncan C., 827.
Bishop, H. H., 823.
Breeck, Theodore L., 393.
Callander, John Calvin, 393.
Culbert, James S., 265.
Devereaux, John L., 963.
Drury, James, 1086.
Eagle, John G., 262.
Elliott, Charles M., 964.
Ellis, John Samuel, 263.
Enge, J. E. Frank, 130.
French, A. H., 129.
George, Harrison H., 963.
Gibson, George D., 394.
Gilliand, S. H , 974.
Gordon, Raymond Vaughn, 129.
Greening, W. L., 826.
Hamilton, Herbert B., 828.
Haynes, Henry, 824.
Hill, Robert C., 395.
Huhne, John A., 1087.
Inglis, George R., 823.
Johnson, Howard C., 826.
Jones, Ernest M., 829.
Kincade, Charles E., 395.
Kinsella, D. E., 393.
Leclaire, Thomas Edward, 265.
Loob, Patrick W., 822.
Lowry, E. F., 825.
McMahon, James H., 397.
Madden, A. Charles, 821.
Marxer, Charles G., 394.
Mattson, William Henry, 264.
Menefee, R. G., 263.
Metcalf, Wood T., 264.
Paxton, Irving B., 825.
Pearson, Mrs. Lucy J., 1088.
Phyfe, Walter B., 396.
Ragland, Marcus J., 1087.
Ratigan, William John, 397.
Reynolds, Myron H., 398.
Richards, Ulysses Sidney, 394.
Roberts, George H., 396.
Sanders, Phillip, 822.
Scott, W. F., 399.
Sheldon, Samuel, 821.
Simpson, Charles R., 1087.
Stevens, Frederick L., 262.
Thomas, William H., 264.
Upshall, John, 964.
Vance, Bert H., 824.
Walker, Robert G., 829.
Ward, Nelson, 130.
Weir, Robert, 1087.
Williams, Charles, 827.
Willis, H. S., 825.
Wilmot, Charles H., 265.
Witte, Charles R., 263.

Papers:

Abortion, Bovine Infectious, 12.
Abortion Control from the Laboratory Standpoint, The Present Status of Infectious, 880.
Adenosarcomata of the Kidneys of Chickens, 238.
Anaplasmosis in Cattle, Investigations on, 704.
Anatomy of the Dog, The, 357.
Autopsy Findings to Field Work in Tuberculosis Control, The Practical Relation of, 89.
Bacillary White Diarrhea, A Comparison of the Pullorin Reaction and the Agglutination Test for, 364.
Bacillary White Diarrhea Control Methods in New England, Standardization of, 434.
Bacillary White Diarrhea, Regulatory Work with, 359.
Bacillary White Diarrhea, Some Experiments on the Control of, 444.
Bang Disease from a Regulatory Standpoint, 622.
Bang's Disease, Results from the Use of Huddleson's Vaccine for, 885.
Biologics, Some Fundamental Principles Underlying the Preparation and use of Veterinary, 901.
Blackleg in Sheep, 63.
Blood as an Aid to the Diagnosis of Hog Cholera, The Study of the Cells of the, 145.
Bodies in Bovines, Foreign, 218.
Breeding Diseases of the Horse, 327.
"Calmette" Method of Vaccination, A Two-Year Experiment with the, 581.
Calmette-Guérin Method of Vaccinating Animals Against Tuberculosis, Studies Concerning the, 773.
Capillaria in Chickens, 1060.
Carcinoma of the Lungs, Heterotopic Deposits of the Thyroid Tissue in a Dog Associated with, 1040.
Cholera-Infected Hogs, A Study of the Simultaneous and Serum-Alone Methods in the Treatment of, 153.
Clover Disease in Cattle, The Pathology of Sweet, 314.
Cuba, Viva, 918.
Diet to Disease, The Relation of, 336.
Distemper, Canine, 736.
Education, Essentials in Veterinary, 293.
Enteritis of Swine, Studies in Infectious, 345.
Fetal Membranes of the Cow, Technic for the Pathological Examination and Recording the Lesions of the, 926.
Fur-Bearing Animals in Captivity, Results of Research on Diseases of, 277.
Glucose Therapy, 1004.
Health Officials Meet, Where Veterinarians and City, 484.
Health Work, The Veterinarian in Public, 892.
Hog Cholera in the Corn Belt, Field Practice Methods of Immunizing Pigs Against, 171.
Hog Cholera, The Study of the Cells of the Blood as an Aid to the Diagnosis of, 145.
Hog Cholera, Some of the Physico-Chemical Properties of the Virus of, 844.
Hookworm Infestation in Dogs (Uncinariasis), 205.
Hospitalization of Small Animals, The, 743.
Injuries to Small Animals, Emergencies Following Automobile, 214.
Insects and Insect-Borne Diseases of Animals, 1027.
Iron in Nutrition, 673.
Johnin Versus Avin Tuberculin as a Diagnostic Agent for Paratuberculosis (Johne's Disease) of Cattle, 985.
Lead Poisoning in the Horse, Clinical Manifestations and Surgical Treatment of, 193.
Meat Inspection, Municipal, 487.
Meat Inspection Service, The Federal, 476.
Mineral Deficiencies in Swine Rations, 651.
Nerve Supply to the Gastric Compartments of the Ruminant (Bovine), A Dissection of the, 1052.
Nitrogen Excretion of Hogs on Velvet-Bean Rations, 376.
Nutritional Diseases of Swine, 661.
Nutrition Experiments Related to the Abortion Problem, Bacteriological Control of, 925.
Parasites in Pennsylvania, Prevention and Control of Sheep, 199.
Parasites of Dogs and Cats, Some of the Rarer and More Neglected, 864.
Parasitism in Domestic Animals, Fecal Examination for Evidence of, 1009.
Paratuberculosis (Johne's Disease) of Cattle, Johnin Versus Avin Tuberculin as a Diagnostic Agent for 985.
Post-Vaccination Trouble—A Possible Diagnostic Method, 425.
Poultry Pathology, Past—Present—Future, A Survey of, 461.
Pox, Swine, 752.
Pox, Vaccination Against Fowl, 762.
Press and the Tuberculosis Eradication Problem, The Agricultural, 512.
Prosecutions, Side-Lights on, 55.

Pullorin Reaction and the Agglutination Test for Bacillary White Diarrhea, A Comparison of the, 364.
Pullorum Disease Control, The Need of Accepted Scientific Standards and Rigid Adherence to Them, In, 453.
Rabies Control in Michigan, 183.
Rabies Control in Port-Au-Prince, Haiti, 921.
Rabies in Indiana, The Control of, 178.
Rabies, The Spread and Control of, 1047.
Rations, Pathological Alterations Observed in Cattle Fed on Special, 227.
Rinderpest, A Single-Injection Method of Immunization Against, 42.
Rinderpest, An Improved Vaccine for Immunization Against, 28.
Service in the United States, Seventy Years of Veterinary, 915.
Sheep, Disease of Range, 196.
Sheep, Some Obscure Diseases of, 724.
Skin Infections of Cattle to Bovine Tuberculosis and Other Acid-Fast Infections, The Relation of Acid-Fast, 553.
Sterility in Boar Responsible for Reduced Size of Litters, 911.
Starch Digestion in the Dog, 768.
Supply of the Profession, The Only Source of, 283.
Therapeutics, A Physiological Basis for Rational, 49.
Thyroid Tissue in a Dog Associated with Carcinoma of the Lungs, Heterotopic Deposits of, 1040.
Tick Eradication in Texas, 587.
Tick Eradication, Organization in Connection with, 598.
Tick Eradication, The Unfinished Work of, 596.
Toxocara Canis (*Belascaris Marginata*) Under Field Conditions, The Survival of the Ova of, 58.
Tuberculosis and Other Acid-Fast Infections, The Relation of Acid-Fast Skin Infections of Cattle to Bovine, 553.
Tuberculosis Control, The Practical Relation of Autopsy Findings to Field Work in, 89.
Tuberculosis Eradication Campaign, 576.
Tuberculosis Eradication Campaign, Present Status of Progress of the National Cooperative, 517.
Tuberculosis Eradication Problem, The Agricultural Press and the, 512.
Tuberculosis-Free State, North Carolina an Accredited, 498.
Tuberculosis, Lesions of, 547.
Tuberculosis, Studies Concerning the Calmette-Guérin Method of Vaccinating Animals Against, 773.
Tuberculosis, The Transmissibility, Infectivity and Sensitivity of, 301.
Tuberculosis to the Human, Transmissibility of Bovine, 526.
Tuberculous Infection, On Heterologous, 505.
Udder and Teats of the Cow and Their Relation to Milk-Production, Some Observations on the Innervation of the, 372.
Undulant Fever in Man to Live Stock Sanitation, Relation of, 605.
Uterus, Returning the, 225.
White Diarrhea Infection Control in Virginia, The Result of Three Years' Work in, 439.

Personals.....131, 266, 400, 830, 965, 1089.
Publications Received.....105, 152.